

Economical labor, cheap land and a slightly better climate for growing shrimp make the Caribbean and Central America obvious choices for production of pond-reared shrimp in the immediate future.

SYM-2 Progress, Problems, and Future of Pompano Culture in Florida. JOHN CINUCANE, National Marine Fisheries Service. - Preliminary research during the last two years shows that it is possible to induce spawning of pompano through the use of gonadotrophins such as HCG. Depending on the degree of oocyte development, some fish can be spawned in 24-48 hours using 100-500 I.U. per pound of fish. Steroids at concentrations of 0.5 to 1 mg. per pound of fish were also used in conjunction with HCG to stimulate follicle as well as luteinizing development of the oocytes. Their use increased the percentage of successful egg fertilization. Injections of HCG alone often produced overripeness of the eggs.

Experiments with alteration of photoperiod and water temperature indicate that natural spawning can be accelerated. A daylength of 14 to 16 hours with increasing temperature was most effective for us. Supplemental injections of hormones were often necessary to trigger spawning.

Salinity tolerance studies with juvenile and adult pompano show pompano can be raised successfully in brackish water from 5 to 20 p.p.t. Growth rates at these low salinities were often better than those of control fish kept at normal seawater salinity. A marked increase in fish diseases, especially fungus infections, was noted at low salinities.

Many problems remain to be solved before commercial production of pompano becomes a reality. The principal need is for the development of larval rearing techniques to eliminate the necessity of obtaining wild stock. Culture of natural foods of the right size, nutrition, and quantity for pompano larvae has not yet been successful on a large scale. Research is needed on artificial food substitutes that will reduce the time and costly equipment required to maintain the necessary stocks of natural food organisms such as copepods.

The future of pompano aquaculture is dependent mainly on breakthroughs in nutrition, physiology, and selective breeding. The multispecies concept of raising other fish, mollusks, and crustaceans with pompano should be developed so that the fish farmer can achieve a year-round harvest and fully utilize the entire food chain in pond culture.

SYM-3 Molluscan culture in Florida, ROBERT M. INGLE, Florida Department of Natural Resources. This report will outline the present state of the art and will list problems that stand in the way of a full realization of Florida's potential.

SYM-4 Progress, Problems, and Future of Catfish Culture in Florida. PAUL C. BARRETT, Fare-General Corporation.

Florida has progressed rapidly from pond cultured catfish into tank raceway and cage culture, with this growth has come numerous disease problems related to intensive culture. Also, shortages of quality fingerling suppliers and large market outlets.

Due to its favorable climate and water supply, Florida will lead the way in the intensive culture of catfish in raceways, tanks, and cages.